

WHAT IS CLAIMED IS:

1. A method for the diagnosis of metabolic bone diseases in a patient, which comprises the step of determining the level of PTHrP in a biological sample of a patient wherein an alteration of PTHrP levels from that of a normal individual is indicative of metabolic bone diseases and/or metabolic bone diseases predisposition.
2. The method of claim 1, wherein said metabolic bone diseases is osteomalacia, osteoporosis, osteopetrosis or Paget's disease.
3. A method for the treatment of metabolic bone diseases, which comprises administering to a patient a compound for the modulation of PEX enzymatic activity modulates PTH and PTHrP levels that regulate osteoblast activity.
4. The method of claim 3, wherein said metabolic bone diseases is osteomalacia, osteoporosis, osteopetrosis or Paget's disease.
5. Use of a compound for the modulation of PEX enzymatic activity for the manufacture of a medicament for treating metabolic bone diseases, wherein said compound modulates PTH and PTHrP levels that regulate osteoblast activity.
6. The use of claim 5, wherein said metabolic bone diseases is osteomalacia, osteoporosis, osteopetrosis or Paget's disease.
7. A method for the treatment of metabolic bone diseases, which comprises modulating PTH and PTHrP levels that regulate osteoblast activity in a patient to modulate bone breakdown and bone formation.

SUB B1)

